UNITED STATES PATENT AND TRADEMARK OFFICE

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SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/28/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

PTOL-90A (Rev. 10/06)

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>20 November 2006</u>.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-32</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-32</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>1/8/07</u>.

4)☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   This Office action is responsive to the following communication: Amendment filed on 20

November 2006.

2.   Claims 1-32 are pending and present for examination. Claims 1, 8, 15, 17, 24, and 31 are

independent.

Response to Amendment

3.   Claims 1-30 have been amended.

4.   No claims have been cancelled.

5.   Claims 31-32 have been added.

Information Disclosure Statement

6.   The information disclosure statement (IDS) submitted on 8 January 2007 is in compliance with

the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by

the examiner.

Claim Rejections - 35 USC § 102

7.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis

for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8.   **Claims 1, 5-6, 8, 12, 13, 15, 17, 21, 22, 24, 28, and 29** are rejected under 35 U.S.C. 102(e)

as being anticipated by Belcaid et al (USPGPUB 2003/0065685, hereinafter referred to as BELCAID), filed

on 24 July 2002, and published on 3 April 2003.

9.   **As per independent claims 1 and 17**, BELCAID teaches:

> A method for storing data records on a database system in which a signing entity is used
> for signing data records, the method comprising:

>> receiving a second data record to be stored on a database {See BELCAID, Para. 0025,
>> wherein this reads over "slave database then retrieves, in step 202, the corresponding data A' from
>> its memory"};

>> retrieving a first integrity checksum stored with a first data record previous to the
>> second data record {See BELCAID, Para. 0025, wherein this reads over "the checksum C of data
>> A from the master database"};

>> computing a second integrity checksum for the second data record with a
>> cryptographic method based on a storage key, the retrieved first integrity
>> checksum and the second data record {See BELCAID, Para. 0025, wherein this reads over
>> "[t]he slave database then . . . calculates, in step 203, (using the same rules as the master database)
>> a checksum C' for the corresponding data A'"}; and

>> storing the second data record and the second integrity checksum on the database
>> {See BELCAID, Para. 0032, wherein this reads over "the master database starts to update the
>> indicated data elements to the slave database"}.

10.   **As per dependent claims 5, 12, 21, and 28**, BELCAID teaches:

> The method according to claim 1, wherein the first integrity checksum is retrieved from a
> memory of a signing entity {See BELCAID, Para. 0025, wherein this reads over "the checksum C of
> data A from the master database"}.

11.   **As per dependent claims 6, 13, 22, and 29**, BELCAID teaches:

> The method according to claim 1, wherein the second integrity checksum is stored on a
> memory of the signing entity {See BELCAID, Para. 0018, wherein this reads over "each database
> can simultaneously be a master of some specific data and a slave of some other data"; and Para. 0025,
> wherein this reads over "[t]he slave database then . . . calculates, in step 203, (using the same rules as
> the master database) a checksum C' for the corresponding data A'"}.

12.   **As per independent claims 8, 15, and 24**, BELCAID teaches:

> A method for verifying integrity of data records on a database in which a verification
> entity is used for verifying integrity of data records, the method comprising:

>> retrieving a second data record to be verified from a first database {See BELCAID, Para.
>> 0025, wherein this reads over "slave database then retrieves, in step 202, the corresponding data A'
>> from its memory"};

retrieving a second integrity checksum of the second data record {See BELCAID, Para. 0027, wherein this reads over "the slave database retrieves, in step 209, the time stamp and the checksum of the corresponding data element from its memory"};

retrieving a first integrity checksum of a first data record previous to the retrieved second data record {See BELCAID, Para. 0025, wherein this reads over "the checksum C of data A from the master database"};

computing a third integrity checksum for the second data record based on the retrieved second data record, the first integrity checksum, and a storage key {See BELCAID, Para. 0025, wherein this reads over "[t]he slave database then . . . calculates, in step 203, (using the same rules as the master database) a checksum C' for the corresponding data A'"}; and

comparing the second integrity checksum to the third integrity checksum, wherein the second data record is considered authentic if the second integrity checksum and the third integrity checksums are equal {See BELCAID, Paras. 0025-0026, wherein this reads over "the slave database compares, in step 204, these two checksums C and C'. If they are the same, the slave database sends, in step 205, an acknowledgement 'ack' to the mast database indicating that no updating is necessary"}.

Claim Rejections - 35 USC § 103

13.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness

rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

14.   **Claims 2, 9, 16, 18, and 25** are rejected under 35 U.S.C. 103(a) as being unpatentable over

BELCAID, in view of Brown et al (USPGPUB 2003/0023850, hereinafter referred to as BROWN), filed on

26 July 2001, and published on 30 January 2003.

15.   **As per dependent claims 2 and 18**, BELCAID, in combination with BROWN, discloses:

The method according to claim 1, wherein the storage key is a secret key of public key infrastructure {See BROWN, Para. 0061, wherein this reads over "In particular, to verify the participants in a messaging session, logging controller 62 utilizes a public key for a user to attempt to decrypt the private key and checksum. If a private key matches a public key, then an identity for a user associated with the public and private keys may be verified. Further, logging controller 62 utilizes the public key to decrypt a checksum for the recorded messaging session and then computes a current checksum for the messaging session. If the checksums match, then the integrity of the messaging session may be verified. In addition, methods other than calculating a checksum may be utilized to verify the integrity of the messaging session."}

The combination of inventions disclosed in BELCAID and BROWN would disclose a method

wherein the storage key is a secret key used for verification purposes in a public key infrastructure.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was

made to modify the above invention suggested by BELCAID by combining it with the invention disclosed

by BROWN.

One of ordinary skill in the art would have been motivated to do this modification so that the

integrity of the signing entity may be verified.

16.   **As per dependent claims 9 and 25**, BELCAID, in combination with BROWN, discloses:

> The method according to claim 8, wherein the storage key is a public key of public key
> infrastructure {See BROWN, Para. 0061, wherein this reads over "In particular, to verify the
> participants in a messaging session, logging controller 62 utilizes a public key for a user to attempt to
> decrypt the private key and checksum. If a private key matches a public key, then an identity for a user
> associated with the public and private keys may be verified. Further, logging controller 62 utilizes the
> public key to decrypt a checksum for the recorded messaging session and then computes a current
> checksum for the messaging session. If the checksums match, then the integrity of the messaging session
> may be verified. In addition, methods other than calculating a checksum may be utilized to verify the
> integrity of the messaging session"}.

The combination of inventions disclosed in BELCAID and BROWN would disclose a method

wherein the storage key is a public key used for verification purposes in a public key infrastructure.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was

made to modify the above invention suggested by BELCAID by combining it with the invention disclosed

by BROWN.

One of ordinary skill in the art would have been motivated to do this modification so that

the integrity of the signing entity may be verified.

17.   **As per dependent claim 16**, BELCAID, in combination with BROWN, discloses:

> The system according to claim 15, wherein the signing entity and verification entity apply
> public key infrastructure for calculating and verifying the one of the first integrity
> checksum and the second integrity checksum {See BROWN, Para. 0061, wherein this reads
> over "In particular, to verify the participants in a messaging session, logging controller 62 utilizes a public
> key for a user to attempt to decrypt the private key and checksum. If a private key matches a public key,
> then an identity for a user associated with the public and private keys may be verified. Further, logging
> controller 62 utilizes the public key to decrypt a checksum for the recorded messaging session and then
> computes a current checksum for the messaging session. If the checksums match, then the integrity of
> the messaging session may be verified. In addition, methods other than calculating a checksum may be
> utilized to verify the integrity of the messaging session."}.

The combination of inventions disclosed in BELCAID and BROWN would disclose a method

wherein the public key infrastructure is applied for verification purposes. Therefore, it would have been

obvious to one of ordinary skill in the art at the time the invention was made to modify the above

invention suggested by BELCAID by combining it with the invention disclosed by BROWN.

One of ordinary skill in the art would have been motivated to do this modification so that either

the first or second integrity checksum of the signing entity may be verified.

18.   **Claims 3, 10, 19, and 26** are rejected under 35 U.S.C. 103(a) as being unpatentable over

BELCAID, in view of Pond et al (U.S. Patent No. 4,864,616, hereinafter referred to as POND), filed on 15

October 1987, and issued on 5 September 5, 1989.

19.   **As per dependent claims 3, 10, 19, and 26**, BELCAID, in combination with POND, discloses:

> The method according to claim 1, wherein the retrieved integrity checksum for a first row
> of the database is a generated initialization vector {See POND, C3:L53-62, wherein this reads
> over "[t]he initialization vector contains bits for indicating the starting bye in each of the key streams used
> for encryption and decryption. The Checksum is derived by summing the . . . the Initialization Vector and
> issued to confirm the integrity of the label"}.

The combination of inventions disclosed in BELCAID and POND would disclose a method wherein

the integrity checksum for a first row of a database is a generated initialization vector. Therefore, it

would have been obvious to one of ordinary skill in the art at the time the invention was made to modify

the above invention suggested by BELCAID by combining it with the invention disclosed by BROWN.

One of ordinary skill in the art would have been motivated to do this modification so that where

there is no previous integrity checksum available, the initialization vector may be used to in the

computation of a second integrity checksum.

20.   **Claims 4, 11, 20, and 27** are rejected under 35 U.S.C. 103(a) as being unpatentable over

BELCAID, in view of Applicant's Admitted Prior Art (hereinafter referred to as AAPA).

21.   **As per dependent claims 4, 11, 20, and 27**, BELCAID, in combination with AAPA, discloses:

> The method according to claim 1, wherein the retrieved integrity checksum for a first row
> of the database is a digital signature of the signing entity {See AAPA, Para. 0004, wherein
> this reads over "[w]ell-known methods for ensuring the integrity of a log file exist already today. . . [such
> as] digital signatures [which] can be used to associate a cryptographical code with each log"}.

22.   **Claims 7, 14, 23, and 30** are rejected under 35 U.S.C. 103(a) as being unpatentable over

BELCAID, in view of Cain (U.S. Patent No. 6,557,044, hereinafter referred to as CAIN), filed on 1 June

1999, and issued on 29 April 2003.

23.   **As per dependent claims 7, 14, 23, and 30**, BELCAID, in combination with CAIN, discloses:

> The method according to claim 1, wherein the integrity checksums comprise a running
> sequence number {See CAIN, c2:l64-67, wherein this reads over "incremental checksumming may be
> utilized. Initially, the checksum for all routes in a set is computed by determining the checksum for all
> sequence numbers"}.

Response to Arguments

24.   Applicant's arguments filed 20 November 2006 have been fully considered but they are not

persuasive.

   a.   **Applicant's Arguments:**

      i.   <u>Claim Rejections under 35 U.S.C. 102</u>

             (1) Applicant asserts the argument that Belcaid fails to disclose "retrieving a first

      integrity checksum stored with a first data record previous to the second data

      record" and "computing a second integrity checksum for the second data record

      with a cryptographic method based on a storage key, the retrieved first integrity

      checksum and the second data record" (See Amendment, page 15).

             (2) Applicant asserts the argument that Belcaid "cannot disclose or suggest

      'storing the second data record and the second integrity checksum on the

      database'" (See Amendment, pages 17-18).

             (3) Applicant asserts the argument that Belcaid does not disclose or suggest

      "any such authentication" but that Belcaid is "concerned with data recovery"

      (See Amendment, page 20).

(4) Applicant asserts the argument that Belcaid fails to disclose or suggest an "integrity checksum" for each data record (See Amendment, page 21).

ii.   Claim Rejections under 35 U.S.C. 103

(1) Applicant asserts the argument that Brown fails to address the features which Belcaid is deficient in addressing (See Amendment, page 23).

(2) Applicant asserts the argument that "the combination of Belcaid and Brown would not have been obvious to one of ordinary skill in the art" (See Amendment, page 23).

(3) Applicant asserts the argument that the combination of Beclaid and Brown would "constitute improper hindsight reconstruction" (See Amendment, page 24).

(4) Applicant asserts the argument that Pond fails to address the features which Belcaid is deficient in addressing (See Amendment, page 25).

(5) Applicant asserts the argument that "it would not have been obvious to combine the teachings of Pond and Belcaid" (See Amendment, page 26).

(6) Applicant asserts the argument that the combination of Belcaid and Applicant's admitted prior art "constitutes legally impermissible hindsight reconstructions" (See Amendment, page 26).

(7) Applicant asserts the argument that Cain fails to address the features which

Belcaid is deficient in addressing (See Amendment, page 27).

(8) Applicant asserts the argument that "it would not have been obvious to

combine the teachings of Cain and Belcaid" (See Amendment, page 28).

b.   **Response to Arguments:**

i.   Claim Rejections under 35 U.S.C. 102

(1) In response to Applicant's assertion that Belcaid fails to disclose "retrieving a

first integrity checksum stored with a first data record previous to the second

data record" and "computing a second integrity checksum for the second data

record with a cryptographic method based on a storage key, the retrieved first

integrity checksum and the second data record," the Examiner respectfully

disagrees.

Applicant asserts the argument that "data A and data A' (nor their

corresponding checksums C and C') are not related as recited in the claims" nor

does an ordinal relationship exist between data A and data A' (See Amendment,

page 16). It is noted that Belcaid indeed does disclose the ordinal storage of

data elements in the following:

> "In some embodiments, where the data elements are e.g. exactly in
> the same order in all databases, it is, however, possible to form the
> summary without data identifiers." (See Belcaid, [0026]).

> "Then the salve database retrieves, in step 209, the time stamp and
> the checksum of the corresponding data element from its memory."
> (See Belcaid, [0027]).

Accordingly, Belcaid does disclose that data identifiers are stored such

that a first data element or record would be stored prior to a second data

element or record. Additionally, if the data elements were to be stored without

an ordinal relationship, there would be not utility in storing the timestamps as

disclosed by Belcaid. That is, the utility of the timestamps in the invention

disclosed by Belcaid is to distinguish data elements from each other with regards

to whether a time stamp indicates a younger or order time of storage.

Applicant asserts the argument that "data A' is not 'to be stored' (as

recited by claim 1) but is already stored" (See Amendment, page 16). It is noted

that while data A' may already exist on a secondary storage device, the claimed

invention of Belcaid discloses a method wherein "the master database starts to

update the indicated data elements to the slave database" (See Belcaid, [0032]).

That is, Belcaid indeed does disclose and suggest the storing of a second data

element or record upon a comparison process implemented upon the age of the

data elements. Therefore, Belcaid does disclose and suggest "retrieving a first

integrity checksum stored with a first data record previous to the second data

record" as recited by claim 1.

Applicant asserts the argument that "computing a second integrity

checksum for the second data record with a cryptographic method based on a

storage key, the retrieved first integrity checksum and the second data record"

(See Amendment, page 17). It is noted that Belcaid discloses the following:

> The checksum is calculated as if the data group were data A. The master database sends the checksums AC and BC in message 3-6 to the slave database DB2. In response to receiving message 3-6, the slave database DB2 divides, in point 3-7, the corresponding data into smaller data groups AA' and AB' according to predetermined rules, and calculates checksums AC' and BC' for each data group, compares for each data group checksum AC with AC' and BC with BC' and deduces for each data group whether an update is needed or not. {See Belcaid, Para. [0044]}.

Therefore, where a checksum is calculated for each data group

according to predetermined rules and in response to receiving a message

containing checksums, one of ordinary skill in the art would acknowledge that

Belcaid indeed does disclose the computation of a second integrity checksum

based on a storage key, the retrieved first integrity checksum and the second

data record.

(2) As per Applicant's assertion that Belcaid "cannot disclose or suggest 'storing

the second data record and the second integrity checksum on the database'," the

Examiner respectfully disagrees. It is noted that Beclaid disclose that "the

checksum C, C' (or other total) may be stored in the database" {See Belcaid,

Para. [0047]}. Furthermore, it is noted that Belcaid discloses the updating of

data groups or data elements to a slave database.

(3) As per Applicant's assertion that Belcaid does not disclose or suggest "any

such authentication" but that Belcaid is "concerned with data recovery," the

Examiner respectfully disagrees. It is noted that a checksum is a generally

known within the art as a calculated value that is used to test data for the

presence of errors or modifications to data. While Belcaid may be concerned

with data recovery, said data recovery necessarily includes the authentication of

data before said data may be recovered and backed up to a secondary storage

device. Hence, Belcaid summarily discloses the computation and retrieval of

checksums for the purpose of authenticating that an update is necessary which

properly reads upon the claimed limitation of whether a record is "considered

authentic."

(4) As per Applicant's assertion that that Belcaid fails to disclose or suggest an

"integrity checksum" for each data record, the Examiner respectfully disagrees.

In response to applicant's argument that the references fail to show certain

features of applicant's invention, it is noted that the features upon which

applicant relies (i.e., differentiating between integrity and consistency

checksums) are not recited in the rejected claim(s). Although the claims are

interpreted in light of the specification, limitations from the specification are not

read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057

(Fed. Cir. 1993). Furthermore, it is noted that Applicant discloses in Paragraph

[0021] of Applicant's Specification that the checksums are compared to see if

"the database has been changed and [it] is not authentic." Accordingly, Belcaid

specifically discloses the comparison of checksums between data sources for the

purposes of determining whether data within the data sources has changes.

Accordingly, said determination of whether a data modification has occurred

would constitute checking the integrity of the data sources. Hence, while Belcaid

may not expressly disclose an "integrity checksum," Belcaid indeed discloses the

functional equivalent of an integrity checksum through the method of comparing

computed checksums.

Accordingly, the rejections under 35 U.S.C. 102 are sustained for the reasons

stated above.

ii.   Claim Rejections under 35 U.S.C. 103

(1) As per Applicant's assertion that Brown fails to address the features which

Belcaid is deficient in addressing, it is noted that Applicant has not asserted any

specific prior art arguments in response to the rejections of the claims but simply

relies on the argument that Belcaid is deficient. Therefore, per Examiner's

aforementioned reasons for sustaining the rejections above and by virtue of

dependency, the rejections of the dependent claims are sustained under 35

U.S.C. 103.

(2) In response to applicant's argument that there is no suggestion to combine

the references, the examiner recognizes that obviousness can only be

established by combining or modifying the teachings of the prior art to produce

the claimed invention where there is some teaching, suggestion, or motivation to

do so found either in the references themselves or in the knowledge generally

available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5

USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941

(Fed. Cir. 1992). In this case, while Belcaid may fail to expressly disclose the a

method wherein "the storage key is a secret key of public key infrastructure,"

Brown discloses a method for utilizing a keys in association with a checksum.

Therefore, while the prior art references are classified in different classifications,

the prior art reference of Brown is reasonably pertinent to the particular problem

with which the applicant was concerned (i.e. the use of public keys in

conjunction with checksums). Therefore, it would have been obvious to one of

ordinary skill in the art to combine said prior art references.

(3) In response to applicant's argument that the examiner's conclusion of

obviousness is based upon improper hindsight reasoning, it must be recognized

that any judgment on obviousness is in a sense necessarily a reconstruction

based upon hindsight reasoning. But so long as it takes into account only

knowledge which was within the level of ordinary skill at the time the claimed

invention was made, and does not include knowledge gleaned only from the

applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*,

443 F.2d 1392, 170 USPQ 209 (CCPA 1971). Therefore, per Examiner's

aforementioned reasons for sustaining the rejections above and by virtue of

dependency, the rejections of the dependent claims are sustained under 35 U.S.C. 103.

(4) As per Applicant's assertion that Pond fails to address the features which Belcaid is deficient in addressing, it is noted that Applicant has not asserted any specific prior art arguments in response to the rejections of the claims but simply relies on the argument that Belcaid is deficient. Therefore, per Examiner's aforementioned reasons for sustaining the rejections above and by virtue of dependency, the rejections of the dependent claims are sustained under 35 U.S.C. 103.

(5) As per Applicant's assertion that "it would not have been obvious to combine the teachings of Pond and Belcaid," the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the Examiner disagrees with Applicant's assertion that Belcaid's system does not require the use of a previous integrity checksum in its calculation of its checksum C. The Examiner notes the aforementioned response to arguments regarding the claims rejections under 35 U.S.C. 102. Therefore, per Examiner's aforementioned reasons for sustaining the rejections above and by virtue of dependency, the rejections of the dependent claims are sustained under 35 U.S.C. 103.

(6) As per Applicant's assertion that the combination of Belcaid and Applicant's

admitted prior art "constitutes legally impermissible hindsight reconstructions,"

the Examiner respectfully disagrees. In response to applicant's argument that

the examiner's conclusion of obviousness is based upon improper hindsight

reasoning, it must be recognized that any judgment on obviousness is in a sense

necessarily a reconstruction based upon hindsight reasoning. But so long as it

takes into account only knowledge which was within the level of ordinary skill at

the time the claimed invention was made, and does not include knowledge

gleaned only from the applicant's disclosure, such a reconstruction is proper.

See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). Therefore,

per Examiner's aforementioned reasons for sustaining the rejections above and

by virtue of dependency, the rejections of the dependent claims are sustained

under 35 U.S.C. 103.

(7) As per Applicant's assertion that Cain fails to address the features which

Belcaid is deficient in addressing, it is noted that Applicant has not asserted any

specific prior art arguments in response to the rejections of the claims but simply

relies on the argument that Belcaid is deficient. Therefore, per Examiner's

aforementioned reasons for sustaining the rejections above and by virtue of

dependency, the rejections of the dependent claims are sustained under 35

U.S.C. 103.

(8) As per Applicant's assertion that "it would not have been obvious to combine

the teachings of Cain and Belcaid," the examiner recognizes that obviousness

can only be established by combining or modifying the teachings of the prior art

to produce the claimed invention where there is some teaching, suggestion, or

motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). The Examiner notes the aforementioned response to arguments regarding the claims rejections under 35 U.S.C. 102. Therefore, per Examiner's aforementioned reasons for sustaining the rejections above and by virtue of dependency, the rejections of the dependent claims are sustained under 35 U.S.C. 103.

Conclusion

25.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

26.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Kim whose telephone number is (571) 272-2737. The examiner can normally be reached on M-F, 9am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Apu Mofiz can be reached on (571) 272-4080. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application

Information Retrieval (PAIR) system. Status information for published applications may be obtained from

either Private PAIR or Public PAIR. Status information for unpublished applications is available through

Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at

866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or

access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Paul Kim
Patent Examiner
Art Unit 2161